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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,875	12/08/2003	Roger Maitland	50587-9 /aba	1163
7380	7590	10/13/2005	EXAMINER DAGOSTA, STEPHEN M	
SMART & BIGGAR/FETHERSTONHAUGH & CO. P.O. BOX 2999, STATION D 900-55 METCALFE STREET OTTAWA, ON K1P5Y6 CANADA			ART UNIT 2683	PAPER NUMBER

DATE MAILED: 10/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/728,875

Applicant(s)

MAITLAND ET AL.

Examiner

Stephen M. D'Agosta

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3,8,15-19 and 24 is/are rejected.
- 7) ☒ Claim(s) 4-7,9-14,20-23 and 25-33 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: Page 1 of the specification needs to have two co-pending application numbers added.

Appropriate correction is required.

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claims 2 and 18 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim states that the "one payload sequence comprises a plurality of payload sequences" and "the one group of corresponding payload sequences comprises a plurality of groups of corresponding payload sequences" which appears to be inherent from the disclosure of claim 1. As written, claim 1 states that a frame is generated by combining a plurality of data frames, each having a payload sequence. Hence this frame will have "one payload sequence comprises a plurality of payload sequences" (as stated in claim 2), therefore claim 2 adds nothing new. The same is true for the corresponding payload sequences.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 8, 15-16, 17, 19 and 24 rejected under 35 U.S.C. 102(b) as being anticipated by Padovani et al. US 6,222,830.

As per **claims 1 and 17**, Padovani teaches a method/apparatus of obtaining a combined data frame in DHO (Diversity Hand-off) from a plurality of data frames each having at least one payload sequence (title, abstract and C1, L18-40), the at least one payload sequence from the plurality of data frames collectively comprising at least one group of corresponding payload sequences with each group of corresponding payload sequences comprising a corresponding payload sequence from each at least one payload sequence, each corresponding payload sequence having associated with the corresponding payload sequence a respective at least one quality indicator (see C1, L18-40 which discloses having multiple packets - eg. payloads and sequence/packet numbers – which are used to correlate the data so as to then combine multiple instances of the same packet together into a combined packet. The Frame Quality Metric, figure 3, #308 reads on a quality indicator), the method comprising:

for each group of corresponding payload sequences:

defining a bit sequence for each corresponding payload sequence in the group of corresponding payload sequences, the bit sequence comprising the respective at least one quality indicator associated with the corresponding payload sequence, each quality indicator of the respective at least one quality indicator comprising one or more consecutive bits within the sequence (figure 3, #308 teaches a Frame Quality Metric that is a string of bits, C6, L64-67 and C7, L53-67); and

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selecting, as a payload sequence for the combined data frame, a payload sequence of the group of corresponding payload sequences on the basis of the bit sequences of the group of corresponding payload sequences (figure 3 shows how multiple inputs (303-1 to 303-4) to the channel processor are combined to create the combined packet with "selected data frame" SDF #305 (see C7, L33-67).

With further regard to claim 16, Padovani teaches a processor with inherent memory (see channel processor, figure 3, #216).

As per **claims 3 and 19**, Padovani teaches claim 1/17 wherein for each corresponding payload sequence of each group of corresponding payload sequences the respective at least one quality indicator comprises a respective plurality of quality indicators (figure 3 FQM #308 is the combination of the CRC/Yamamoto bits (#302/#304) from the data inputted into the channel processor).

As per **claims 8 and 24**, Padovani teaches claim 1/17 wherein the plurality of data frames comprises two data frames (figure 3 shows multiple data packets/frames being inputted into the channel processor).

As per **claims 15-16**, Padovani teaches claim 1 wherein the method is implemented in both software and hardware (figure 3 shows a Channel Processor, eg. hardware, which uses software to combine the inputted data into a packet #305 with Selected Data Frame #305).

Allowable Subject Matter

Claims 4-7, 9-14, 20-23 and 25-33 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. These claims recite highly detailed limitations not found, alone in or combination, in the prior art of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1. Shinozaki US 2005/0130690
2. Gilhousen et al. US 5,103,459
3. Neumiller et al. US 6,226,283
4. Tiedemann Jr. US 6,307,849
5. Chheda et al. US 6,181,738
6. Mimura US 6,285,887
7. Miyamoto US 6,628,924

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen D'Agosta
9-12-2005

